

§103(a) as purportedly being obvious over Chow in view of various other references. Each of these rejections is respectfully traversed.

Claims 1 and 18

In Applicant's previous response (mailed December 8, 2006), Applicant pointed out that Chow does not disclose or suggest, "assigning to an edge a direction and assigning to an edge a weight equal to a fraction of maximum permissible noise at a link corresponding to a second vertex contributed by activity on the link corresponding to the first vertex," as recited in both independent claims 1 and 18 (*See* Applicant's response of December 8, 2006, page 6). Applicant noted that Chow merely discloses assigning a 0 or 1 to an entry in a table to represent whether selected links interfere with one another. Chow does not disclose or suggest assigning an edge *a weight equal to a fraction of maximum permissible*, as recited in Applicant's claims 1 and 18 (*See* Applicant's response of December 8, 2006, page 6).

In response, the Office Action asserts that Chow discloses this limitation at col. 11, lines 58-66 and Table 2 in column 14. The Office Action notes that Table 2 of Chow is an array of all possible links and that a "0" is placed in a table entry if two links interfere with each other and a "1" is placed in the entry if they do not. The table can then be used to determine which links are interfered with by the most other links (*See* Office Action, page 8).

Though Table 2 of Chow indicates which links interfere with each other, Chow does not disclose assigning an edge a weight equal to a fraction of maximum permissible noise, as required by each of claims 1 and 18. That is, Table 2 of Chow shows every link that interferes with a given link. For example, as shown in Table 2 of Chow, links 2 and 5 interfere with link 1 and links 1, 3, 6, and 7 interfere with link 2. However, although it can be determined from the information in Table 2 which links interfere with any other link, it cannot be determined to what extent each of these interfering links contributes to the interference. That is, assume the maximum possible noise for link 1 to still be operational is 10 dB. Table 2 of Chow provides no information indicating what fraction of the 10 dB each of links 2 and 5 contribute. For example, Chow does not disclose providing information indicating that link 2 contributes, for example, twenty percent of the maximum permissible amount (i.e. 2 dB) and link 5 contributes fifty

percent of the maximum permissible amount (i.e. 5 dB). Table 2 of Chow indicates merely that a first link interferes with a second link, but not does not provide any information indicating to what extent the first link interferes with the second link.

By contrast, claims 1 and 18 each recite a method whereby each link is represented as a vertex, and two vertices are connected by an edge if the links represented by those vertices interfere with each other. In addition, the edge connecting two vertices is assigned a weight equal to a fraction of a maximum permissible noise at one vertex that is contributed by another vertex.

Thus, an edge connecting two vertices provides multiple pieces of information. First, the edge indicates that the links represented by the two vertices interfere with each other. In addition, the edge indicates how much interference a first of the two vertices contributes to the maximum permissible noise at the second of the two vertices.

Thus, for example, if a link 1 is represented by a vertex A, link 2 is represented by a vertex B and link 1 interferes with link 2, then an edge connects vertex A and vertex B. In addition, if, for example, the maximum permissible noise for link 2 to operate is 10 dB, and link 1 contributes 5 dB of interference to link 2, then the edge connecting vertex A and vertex B is assigned a weight equal to the fraction of the maximum permissible noise of link 2 contributed by activity on link 1 (i.e., 5/10 or fifty percent).

Table 2 of Chow, however, indicates only that a first link interferes with a second link, but does not indicate to what extent the first link interferes with the second link.

The Office Action notes that previously-pending claim 3 (canceled in the amendment filed December 8, 2006), recited steps of assigning the edge a weight of zero if two links are not in conflict with each other and assigning the edge a weight of one if two links are in conflict with each other. The Office Action appears to rely on the limitation of canceled claim 3 to interpret the limitation of claims 1 and 18 that recites assigning to an edge, "a weight equal to the fraction of a maximum permissible noise at a link corresponding to the second vertex contributed by activity on the link corresponding to the first vertex," broadly enough to cover assigning the edge a weight of zero if there is no interference and a weight of one if there is interference. Applicant respectfully asserts that this interpretation of claim 1 is improper.

Claim 1, as initially filed, did not recite steps of “assigning to the edge a direction” and “assigning to the edge a weight equal to a fraction of a maximum permissible noise...” However, these limitations were recited in dependent claim 4, and were incorporated into independent claim 1 in Applicant’s amendment mailed June 21, 2006.

Thus, both claim 3 and claim 4, as initially filed, depended from claim 1 and each was directed to a different embodiment. That is, claim 3 was directed to an embodiment wherein an edge is assigned a weight of zero if the links are not in conflict with each other and a weight of one if the links are in conflict with each other. Claim 4 was directed to a different embodiment in which, as discussed above, an edge is assigned a weight that is equal to the fraction of a maximum permissible noise at a link corresponding to the second vertex contributed by activity on the link corresponding to the first vertex.

The Office Action of March 22, 2006 indicated claim 4 as allowable if rewritten in independent form. Thus, in Applicant’s response mailed June 21, 2006, when Applicant amended claim 1 to incorporate the limitations of claim 4, Applicant inadvertently left claim 3 in the application (though claim 3 should have been canceled because it was directed to a different embodiment than claim 4). After recognizing this error, Applicant canceled claim 3 in the response mailed December 8, 2006.

Thus, claim 3 is now canceled and should not be relied upon to interpret the limitation of claim 1 (incorporated from previously-pending claim 4) that recites, “assigning to the edge a weight equal to a fraction of a maximum permissible noise” to read on merely assigning a weight of zero if the links do not conflict and a weight of one if the links do conflict.

Because Chow does not disclose assigning an edge, “a weight equal to the fraction of a maximum permissible noise at a link corresponding to the second vertex contributed by activity on the link corresponding to the first vertex,” as recited in each of claims 1 and 18, these claims patentably distinguish over Chow. Accordingly, it is respectfully requested that the rejection of these claims be withdrawn.

Claims 2 and 5-17 depend from claim 1 and are patentable for at least the same reasons. Accordingly, it is respectfully requested that the rejection of these claims be withdrawn.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

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